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10/767,405	01/29/2004	Santosh Shanbhag	112-0136US	2871
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WONG, CABELLO, LUTSCH, RUTHERFORD & BRUCCULERI, L.L.P. 20333 SH 249 SUITE 600 HOUSTON, TX 77070			WON, MICHAEL YOUNG	
		ART UNIT	PAPER NUMBER	2155
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/767,405	SHANBHAG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	MICHAEL Y. WON	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 31 July 2008.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-117 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-117 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_.

## DETAILED ACTION

1. This action is in response to the Examiner's Interview conducted on July 23, 2008 and Amendment After Final filed July 31, 2008.
2. Claims 1-117 have been examined and are pending with this action.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 5-10, 13-18, 21-29, 32-40, 43-51, 54-62, 65-72, 75-82, 85-92, and 95-117 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul et al. (US 6,763,417).

### **INDEPENDENT:**

As per **claim 1**, Paul teaches a data switching device for connecting to a series of nodes and to a first fabric, the device comprising:

a plurality of fabric ports for coupling to the series of nodes (see col.8, lines 33-36: "one or more ports called F\_Port, on an FCPA);

at least one port for connecting to the first fabric (see col.8, lines 62-64: “The third type of port that the equipment may support is the E\_Port. This interface is used when cascading fibre channel switches”); and

a switch (see col.4, lines 65-67) coupled to said plurality of fabric ports (see col.8, lines 57-64: “With the SL\_Ports, FCPA ports can be connected to one or more FL\_Ports to create a connection between one or more loop segments” & “E\_Port. This interface is used when cascading fibre channel switches”) and said at least one port for interconnecting said ports (see col.6, lines 20-24 and col.8, lines 33-41: “An N\_Port is used to connect directly to one or more one of the ports, called an F\_Port, on an FCPA”).

Paul does not explicitly teach that the at least one port for connecting to the first fabric is a node port.

Paul does however teach a port for connecting to a fabric (see col.8, lines 57-64: “SL\_Ports” and “E\_Port”)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Paul by implementing a node port. One would be motivated to do so because the port functionality of connecting to a fabric remains the same.

As per **claim 9**, Paul teaches a Fibre Channel switch for connecting to a series of nodes and to a first fabric, the switch comprising:

a plurality of F\_\_ports for coupling to the series of nodes (see col.8, lines 33-36: “one or more ports called F\_Port, on an FCPA);

at least one port for connecting to the first fabric (see col.8, lines 62-64: “The third type of port that the equipment may support is the E\_Port. This interface is used when cascading fibre channel switches”); and

a switch circuit (see col.4, lines 65-67) coupled to said plurality of F\_\_ports (see col.8, lines 57-64: “With the SL\_Ports, FCPA ports can be connected to one or more FL\_Ports to create a connection between one or more loop segments” & “E\_Port. This interface is used when cascading fibre channel switches”) and said at least one port for interconnecting said ports (see col.6, lines 20-24 and col.8, lines 33-41: “An N\_Port is used to connect directly to one or more one of the ports, called an F\_Port, on an FCPA”).

Paul does not explicitly teach that the at least one port for connecting to the first fabric is an N\_port.

Paul does however teach a port for connecting to a fabric (see col.8, lines 57-64: “SL\_Ports” and “E\_Port”)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Paul by implementing an N\_port. One would be motivated to do so because the port functionality of connecting to a fabric remains the same.

As per **claim 17**, Paul teaches a network comprising:

a series of nodes (see Fig.3);  
a first fabric (see col.5, lines 53-55: “This “Fabric” could be made up of many “switches”, since a switch is the smallest switch topology entity that has the attributes of a Fabric”); and

a data switching device connected to said series of nodes and to said first fabric (see col.4, lines 65-67), said device including:

a plurality of fabric ports coupled to said series of nodes (see col.6, lines 20-24 and col.8, lines 33-41: “An N\_Port is used to connect directly to one or more one of the ports, called an F\_Port, on an FCPA”);

at least one port connected to said first fabric (see col.8, lines 57-64: “With the SL\_Ports, FCPA ports can be connected to one or more FL\_Ports to create a connection between one or more loop segments” & “E\_Port. This interface is used when cascading fibre channel switches”); and

a switch coupled to said plurality of fabric ports and said at least one port for interconnecting said ports (see col.4, lines 65-67).

Paul does not explicitly teach that the at least one port for connecting to the first fabric is a node port.

Paul does however teach a port for connecting to a fabric (see col.8, lines 57-64: “SL\_Ports” and “E\_Port”)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Paul by implementing a node port. One

would be motivated to do so because the port functionality of connecting to a fabric remains the same.

As per **claim 28**, Paul teaches a network comprising:

- a series of nodes (see Fig.3);
- a first fabric (see col.5, lines 53-55: “This “Fabric” could be made up of many “switches”, since a switch is the smallest switch topology entity that has the attributes of a Fabric”); and
- a Fibre Channel switch connected to said series of nodes and to said first fabric (see col.4, lines 65-67), said switch including:
  - a plurality of F\_ports coupled to said series of nodes (see col.6, lines 20-24 and col.8, lines 33-41: “An N\_Port is used to connect directly to one or more one of the ports, called an F\_Port, on an FCPA”);
  - at least one port connected to said first fabric (see col.8, lines 57-64: “With the SL\_Ports, FCPA ports can be connected to one or more FL\_Ports to create a connection between one or more loop segments” & “E\_Port. This interface is used when cascading fibre channel switches”); and
  - a switch circuit coupled to said plurality of F\_ports and said at least one port for interconnecting said ports (see col.4, lines 65-67).

Paul does not explicitly teach that the at least one port for connecting to the first fabric is an N\_port.

Paul does however teach a port for connecting to a fabric (see col.8, lines 57-64: “SL\_Ports” and “E\_Port”)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Paul by implementing an N\_port. One would be motivated to do so because the port functionality of connecting to a fabric remains the same.

As per **claim 39**, Paul further teaches a network comprising:  
a series of nodes, each having two ports (see Fig.3 and col.8, lines 33-36);  
a first fabric (see col.5, lines 53-55: “This “Fabric” could be made up of many “switches”, since a switch is the smallest switch topology entity that has the attributes of a Fabric”); and

two data switching devices, each connected to one port of each of said series of nodes and to said first fabric (see col.4, lines 65-67 and col.5, lines 53-56: “This “Fabric” could be made up of many “switches””), each said device including:

a plurality of fabric ports coupled to said one port of said series of nodes (see col.6, lines 20-24 and col.8, lines 33-41: “An N\_Port is used to connect directly to one or more one of the ports, called an F\_Port, on an FCPA”);

at least one port connected to said first fabric (see col.8, lines 57-64: “With the SL\_Ports, FCPA ports can be connected to one or more FL\_Ports to create a connection between one or more loop segments” & “E\_Port. This interface is used when cascading fibre channel switches”); and

a switch coupled to said plurality of fabric ports and said at least one port for interconnecting said ports (see col.4, lines 65-67 and col.5, lines 53-56: "This "Fabric" could be made up of many "switches"").

Paul does not explicitly teach that the at least one port for connecting to the first fabric is a node port.

Paul does however teach a port for connecting to a fabric (see col.8, lines 57-64: "SL\_Port" and "E\_Port")

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Paul by implementing a node port. One would be motivated to do so because the port functionality of connecting to a fabric remains the same.

As per **claim 50**, Paul teaches a network comprising:

a series of nodes, each having two ports (see Fig.3 and col.8, lines 33-36);  
a first fabric (see col.5, lines 53-55: "This "Fabric" could be made up of many "switches", since a switch is the smallest switch topology entity that has the attributes of a Fabric"); and

two Fibre Channel switches connected to one port of each of said series of nodes and to said first fabric (see col.4, lines 65-67 and col.5, lines 53-56: "This "Fabric" could be made up of many "switches""), each said switch including:

a plurality of F\_ports coupled to said one port of said series of nodes (see col.6, lines 20-24 and col.8, lines 33-41: “An N\_Port is used to connect directly to one or more one of the ports, called an F\_Port, on an FCPA”);

at least one port connected to said first fabric (see col.8, lines 57-64: “With the SL\_Ports, FCPA ports can be connected to one or more FL\_Ports to create a connection between one or more loop segments” & “E\_Port. This interface is used when cascading fibre channel switches”); and

a switch circuit coupled to said plurality of F\_ports and said at least one port for interconnecting said ports (see col.4, lines 65-67 and col.5, lines 53-56: “This “Fabric” could be made up of many “switches””).

Paul does not explicitly teach that the at least one port for connecting to the first fabric is an N\_port.

Paul does however teach a port for connecting to a fabric (see col.8, lines 57-64: “SL\_Ports” and “E\_Port”)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Paul by implementing an N\_port. One would be motivated to do so because the port functionality of connecting to a fabric remains the same.

As per **claim 61**, Paul teaches a network comprising:  
a series of nodes, each having two ports (see Fig.3 and col.8, lines 33-36);

first and second fabrics (see col.5, lines 53-55: "This "Fabric" could be made up of many "switches", since a switch is the smallest switch topology entity that has the attributes of a Fabric"); and

two data switching devices, each connected to one port of each of said series of nodes and to said first and second fabrics (see col.4, lines 65-67 and col.5, lines 53-56: "This "Fabric" could be made up of many "switches""), each said device including:

a plurality of fabric ports coupled to said one port of said series of nodes (see col.6, lines 20-24 and col.8, lines 33-41: "An N\_Port is used to connect directly to one or more one of the ports, called an F\_Port, on an FCPA");

two ports, one connected to each of said first and second fabrics (see col.8, lines 57-64: "With the SL\_Ports, FCPA ports can be connected to one or more FL\_Ports to create a connection between one or more loop segments" & "E\_Port. This interface is used when cascading fibre channel switches"); and

a switch coupled to said plurality of fabric ports and said two ports for interconnecting said ports (see col.4, lines 65-67 and col.5, lines 53-56: "This "Fabric" could be made up of many "switches"").

Paul does not explicitly teach that the at least one port for connecting to the first fabric is a node port.

Paul does however teach a port for connecting to a fabric (see col.8, lines 57-64: "SL\_Ports" and "E\_Port")

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Paul by implementing a node port. One

would be motivated to do so because the port functionality of connecting to a fabric remains the same.

As per **claim 71**, Paul teaches a network comprising:  
a series of nodes, each having two ports (see Fig.3 and col.8, lines 33-36);  
first and second fabrics (see col.5, lines 53-55: “This “Fabric” could be made up of many “switches”, since a switch is the smallest switch topology entity that has the attributes of a Fabric”); and  
two Fibre Channel switches connected to one port of each of said series of nodes and to said first and second fabrics (see col.4, lines 65-67 and col.5, lines 53-56: “This “Fabric” could be made up of many “switches””), each said switch including:  
a plurality of F\_ports coupled to said one port of said series of nodes (see col.6, lines 20-24 and col.8, lines 33-41: “An N\_Port is used to connect directly to one or more one of the ports, called an F\_Port, on an FCPA”);  
two ports, one connected to each of said first and second fabrics (see col.8, lines 57-64: “With the SL\_Ports, FCPA ports can be connected to one or more FL\_Ports to create a connection between one or more loop segments” & “E\_Port. This interface is used when cascading fibre channel switches”); and  
a switch circuit coupled to said plurality of F\_ports and said two ports for interconnecting said ports (see col.4, lines 65-67 and col.5, lines 53-56: “This “Fabric” could be made up of many “switches””).

Paul does not explicitly teach that the at least one port for connecting to the first fabric is an N\_port.

Paul does however teach a port for connecting to a fabric (see col.8, lines 57-64: “SL\_Ports” and “E\_Port”)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Paul by implementing an N\_port. One would be motivated to do so because the port functionality of connecting to a fabric remains the same.

As per **claim 81**, Paul teaches a network comprising:

a series of nodes, each having two ports (see Fig.3 and col.8, lines 33-36); first and second fabrics (see col.5, lines 53-55: “This “Fabric” could be made up of many “switches”, since a switch is the smallest switch topology entity that has the attributes of a Fabric”); and

two data switching devices, each connected to one port of each of said series of nodes and to one of said first and second fabrics (see col.4, lines 65-67 and col.5, lines 53-56: “This “Fabric” could be made up of many “switches””), each said device including:

a plurality of fabric ports coupled to said one port of said series of nodes (see col.6, lines 20-24 and col.8, lines 33-41: “An N\_Port is used to connect directly to one or more one of the ports, called an F\_Port, on an FCPA”);

two ports connected to one of said first and second fabrics (see col.8, lines 57-64: “With the SL\_Ports, FCPA ports can be connected to one or more FL\_Ports to create a connection between one or more loop segments” & “E\_Port. This interface is used when cascading fibre channel switches”); and a switch coupled to said plurality of fabric ports and said two ports for interconnecting said ports (see col.4, lines 65-67 and col.5, lines 53-56: “This “Fabric” could be made up of many “switches””).

Paul does not explicitly teach that the at least one port for connecting to the first fabric is a node port.

Paul does however teach a port for connecting to a fabric (see col.8, lines 57-64: “SL\_Ports” and “E\_Port”)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Paul by implementing a node port. One would be motivated to do so because the port functionality of connecting to a fabric remains the same.

As per **claim 91**, Paul teaches a network comprising:  
a series of nodes, each having two ports (see Fig.3 and col.8, lines 33-36);  
first and second fabrics (see col.5, lines 53-55: “This “Fabric” could be made up of many “switches”, since a switch is the smallest switch topology entity that has the attributes of a Fabric”); and

two Fibre Channel switches connected to one port of each of said series of nodes and to one of said first and second fabrics (see col.4, lines 65-67 and col.5, lines 53-56: “This “Fabric” could be made up of many “switches””), each said switch including:

a plurality of F\_\_ports coupled to said one port of said series of nodes (see col.6, lines 20-24 and col.8, lines 33-41: “An N\_Port is used to connect directly to one or more one of the ports, called an F\_Port, on an FCPA”);

two ports connected to one of said first and second fabrics (see col.8, lines 57-64: “With the SL\_Ports, FCPA ports can be connected to one or more FL\_Ports to create a connection between one or more loop segments” & “E\_Port. This interface is used when cascading fibre channel switches”); and

a switch circuit coupled to said plurality of F\_ports and said two ports for interconnecting said ports (see col.4, lines 65-67 and col.5, lines 53-56: “This “Fabric” could be made up of many “switches””).

Paul does not explicitly teach that the at least one port for connecting to the first fabric is an N\_port.

Paul does however teach a port for connecting to a fabric (see col.8, lines 57-64: “SL\_Ports” and “E\_Port”)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Paul by implementing an N\_port. One would be motivated to do so because the port functionality of connecting to a fabric remains the same.

As per **claim 101**, Paul teaches a method for routing between a series of nodes and a first fabric using a data switching device, the method comprising:

providing a plurality of fabric ports on the device coupled to the series of nodes (see col.8, lines 33-36: “one or more ports called F\_Port, on an FCPA);

providing at least one port on the device connected to the first fabric (see col.8, lines 62-64: “The third type of port that the equipment may support is the E\_Port. This interface is used when cascading fibre channel switches”); and

interconnecting said plurality of fabric ports (see col.6, lines 20-24 and col.8, lines 33-41: “An N\_Port is used to connect directly to one or more one of the ports, called an F\_Port, on an FCPA”) and said at least one port with the device (see col.8, lines 57-64: “With the SL\_Ports, FCPA ports can be connected to one or more FL\_Ports to create a connection between one or more loop segments” & “E\_Port. This interface is used when cascading fibre channel switches”).

Paul does not explicitly teach that the at least one port for connecting to the first fabric is a node port.

Paul does however teach a port for connecting to a fabric (see col.8, lines 57-64: “SL\_Ports” and “E\_Port”)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Paul by implementing a node port. One would be motivated to do so because the port functionality of connecting to a fabric remains the same.

**DEPENDENT:**

As per **claims 2, 10, 18, 29, 40, 51, 62, 72, 82, 92, and 102**, which respectively depend on claims 1, 9, 17, 28, 39, 50, 61, 71, 81, 91, and 101, Paul further teaches wherein said at least one node port (N\_port) operates as a virtual node port (see col.3, lines 64-66), with one virtual node address for each of said plurality of fabric ports (F\_ports) connected to nodes (col.12, lines 35-45).

As per **claims 5, 13, 21, 32, 43, 54, 65, 75, 85, 95, and 103**, which respectively depend on claims 1, 9, 17, 28, 39, 50, 61, 71, 81, 91, and 101, Paul teaches further comprising:

at least one intermediate port coupled to said switch (switch circuit), wherein said switch routes frames between said plurality of fabric ports (F\_ports) and said at least one node port (N\_port) through said at least one intermediate port (see col.8, lines 34-41).

As per **claims 6, 14, 22, 33, 44, 55, 66, 76, 86, 96, and 104**, which respectively depend on claims 5, 13, 21, 32, 43, 54, 65, 75, 85, 95, and 103, Paul further teaches wherein the interconnection between said at least one intermediate port and either said plurality of fabric ports (F\_ports) or said at least one node port (N\_port) is a private interconnection and said at least one intermediate port and said other port perform public to private and private to public address translations (see col.8, lines 42-62).

As per **claims 7, 15, 23, 34, 45, 56, and 105**, which respectively depend on claims 5, 13, 21, 32, 43, 54, 103, Paul further teaches wherein the number of intermediate ports equals the number of node ports (N\_ports) (see col.2, lines 14-17).

As per **claims 8, 16, 24, 35, 46, 57, 67, 77, 87, 97, and 106**, which respectively depend on claims 1, 9, 17, 28, 39, 50, 61, 71, 81, 91, and 101, Paul further teaches wherein said switch performs public to private and private to public address translations between said plurality of fabric ports (F\_ports) and said at least one node port (N\_port) (see col.8, lines 42-62).

As per **claims 25, 36, 47, 58, 68, 78, 88, and 98**, which respectively depend on claims 17, 28, 39, 50, 61, 71, 81, and 91, Paul further teaches wherein said nodes are host computers (see Fig.3).

As per **claims 26, 37, 48, 59, 69, 79, 89, and 99**, which respectively depend on claims 25, 36, 47, 58, 68, 78, 88, and 98, Paul further teaches wherein said host computers are blade computers and are located in a blade server chassis (see col.7, lines 41-43 & lines 55-59).

As per **claims 27, 38, 49, 60, 70, 80, 90, and 100**, which respectively depend on claims 26, 37, 48, 59, 69, 79, 89, and 99, Paul further teaches wherein said data switching device is a blade located in said blade server chassis (see col.7, lines 41-43 & lines 55-59).

As per **claims 107-117**, which respectively depend on claims 1, 9, 17, 28, 39, 50, 61, 71, 81, 91, and 101, Paul further teaches wherein said plurality of fabric ports (F\_ports) form a second fabric (see col.8, lines 38-41).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-4, 11-12, 19-20, 30-31, 41-42, 52-53, 63-64, 73-74, 83-84, and 93-94 rejected under 35 U.S.C. 103(a) as being unpatentable over Paul et al. (US 6,763,417) in view of Cohen (US 7,107,347).

As per **claims 3, 11, 19, 30, 41, 52, 63, 73, 83, and 93**, which respectively depend on claims 1, 9, 17, 28, 39, 50, 61, 71, 81, and 91, Paul does not explicitly teach wherein said switch (switch circuit) is further adapted to act as a firewall.

Cohen teaches wherein said switch (switch circuit) is further adapted to act as a firewall (see col.5, lines 31-34).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Paul in view of Cohen so that said switch (switch circuit) is further adapted to act as a firewall. One would be motivated to do so because Paul teaches of communication between public and private loops (see col.6, lines 33-35 and col.8, lines 52-62).

As per **claims 4, 12, 20, 31, 42, 53, 64, 74, 84, and 94**, which respectively depend on claims 1, 9, 17, 28, 39, 50, 61, 71, 81, and 91, Paul does not explicitly teach wherein said switch (switch circuit) is further adapted for intrusion detection.

Cohen teaches wherein said switch (switch circuit) is further adapted for intrusion detection (see col.10, lines 35-45).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Paul in view of Cohen so that said switch (switch circuit) is further adapted for intrusion detection. One would be motivated to do so because Cohen teaches intrusion detection provides proper protection to prevent from being exploited by attackers (see col.10, lines 62-64).

### ***Response to Arguments***

5. Applicant's arguments with respect to claim 1-117 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. For the reasons above, claims 1-117 have been rejected and remain pending.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL Y. WON whose telephone number is (571)272-3993. The examiner can normally be reached on M-Th: 10AM-8PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Won/

Primary Examiner

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